

N^o 26,419



A.D. 1903

Date of Application, 3rd Dec., 1903—Accepted, 11th Feb., 1904

COMPLETE SPECIFICATION.

Improvements in Apparatus for Administering Anaesthetics.

I, ERNEST WILLIAM POOLE, of, 54 Poland Street, London, W. Surgical Instrument Maker, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

5 This invention relates to improvements in apparatus for administering anaesthetics, and refers more particularly to apparatus whereby gas or ether either alone or in combination, may be supplied to the patient, the object being to provide simple and efficient means whereby the gas supply may be cut off and a corresponding amount of ether administered, a further object being to
10 provide means whereby the supply of ether may be readily maintained.

The invention consists primarily in introducing between the gas bag and face piece, or mask a three-way cock connected at one side with the gas bag, and at the opposite side with the face piece, and by its third opening with the ether bag, and in arranging the three-way cock in such a manner that while
15 the passage to the face piece or mask is always open, the passage to the ether bag is opened as the passage to the gas bag is closed, and in equal proportion, so that at first gas alone may be administered, and then by gradually turning the cock, the gas may be partially shut off, and an amount of ether, corresponding to the gas which has been shut off, may be admitted, and in this manner
20 any proportion of gas and ether may be administered, or by turning the cock to its full extent, the gas may be completely cut off, and ether alone administered.

In order that this invention may be fully understood, it will now be described with reference to the accompanying drawings, in which:—

Fig. 1 is a side elevation, partly in section, illustrating the three-way cock, ether bag and face piece or mask, and
25

Fig. 2 is a vertical section through the three-way cock.

According to this invention, and as shewn in the accompanying drawings, to the top of the ether bag *a*, a three-way cock *b* (Fig. 1) is mounted, having a tubular connection *c* leading to the face piece or mask *f*, a connection *c*¹ designed
30 to be connected to the gas bag (not shewn), and a connection *c*² leading to the ether bag *a*, while the cock, as shewn in Fig. 2, comprises an outer cylindrical casing *d*, and an inner drum or cylinder *e* which is closed at each end and turned by the handle *h* as indicated in dotted lines, the play being limited by a suitable stop or stops. The outer casing *d* is formed with an opening *g* leading to the connection *c*, an opening *g*¹ leading to the connection *c*¹ and an opening *g*² leading to the connection *c*², while the inner drum or cylinder *e* is formed with an opening *i* common to the opening *g*, *g*², and an opening *i*¹ common to the openings *g*¹, *g*².
35

In practice, with the valve in the position shewn in Fig. 2, a clear passage
40 is open from the gas bag to the face piece or mask, through the connections *c*¹, *c*, and the openings *g*¹, *i*¹, *i*, *g*, while by turning the valve in the direction indicated in dotted lines, the opening *g*¹ leading to the gas bag, may be more or less closed, and by the construction of the valve, the opening *g*² leading to the ether bag is thereby opened to a corresponding extent, the passage from the
45 ether bag to the face piece or mask being then through the connection *c*², the

[Price 8d.]

Poole's Improvements in Apparatus for Administering Anaesthetics.

openings g^2 , i & g , and the connection c , while by turning the valve to the full extent indicated in dotted lines, the opening g^1 leading to the gas bag may be closed, and the opening g^2 leading to the ether bag, fully opened, and in this manner gas alone, any proportion of gas and ether, or ether alone may be administered.

Referring to Fig. 1, the upper part of the ether bag a is provided with a wire cage or cradle to support a sponge designed to be saturated with ether, and in order that the supply of the latter may be easily and conveniently maintained, a small cup j^1 is connected with the apparatus above the cage or cradle j , which is normally closed by a plug j^2 , and has a tubular connection with the interior so that ether may be poured into the cup j^1 and passed through to the sponge.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. In apparatus for administering anaesthetics, the arrangement between the face piece and the gas bag, of a three way cock, having connections with the said face piece and gas bag, and a third connection with the ether bag, to admit of gas alone, any proportion of gas and ether, or ether alone being administered; substantially as described and shewn.

2. In apparatus for administering anaesthetics, the combination with a gas bag, ether bag and face piece or mask, of a three way cock comprising an outer cylindrical casing such as d furnished with openings g , g^1 , g^2 , and tubular connections c , c^1 , c^2 , leading therefrom and adapted to be connected with the face piece, gas bag and ether bag respectively, and an inner drum or cylinder such as e furnished with openings such as i , i^1 , and a handle such as h whereby the inner drum or cylinder e may be turned; the whole arranged and operating substantially as described and shewn with reference to the accompanying drawings, and for the purposes specified.

3. In apparatus for administering anaesthetics, the combination with an ether bag such as a , of a cup such as j^1 , normally closed by a stopper or plug such as j^2 , and having tubular connection with the top of the ether bag for facilitating the supply of ether thereto; substantially as set forth.

Dated this 19th day of August 1903.

CASSELL & Co.,
Crown Chambers, 9 Regent Street, London, S.W.
Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1904.



Fig. 1.

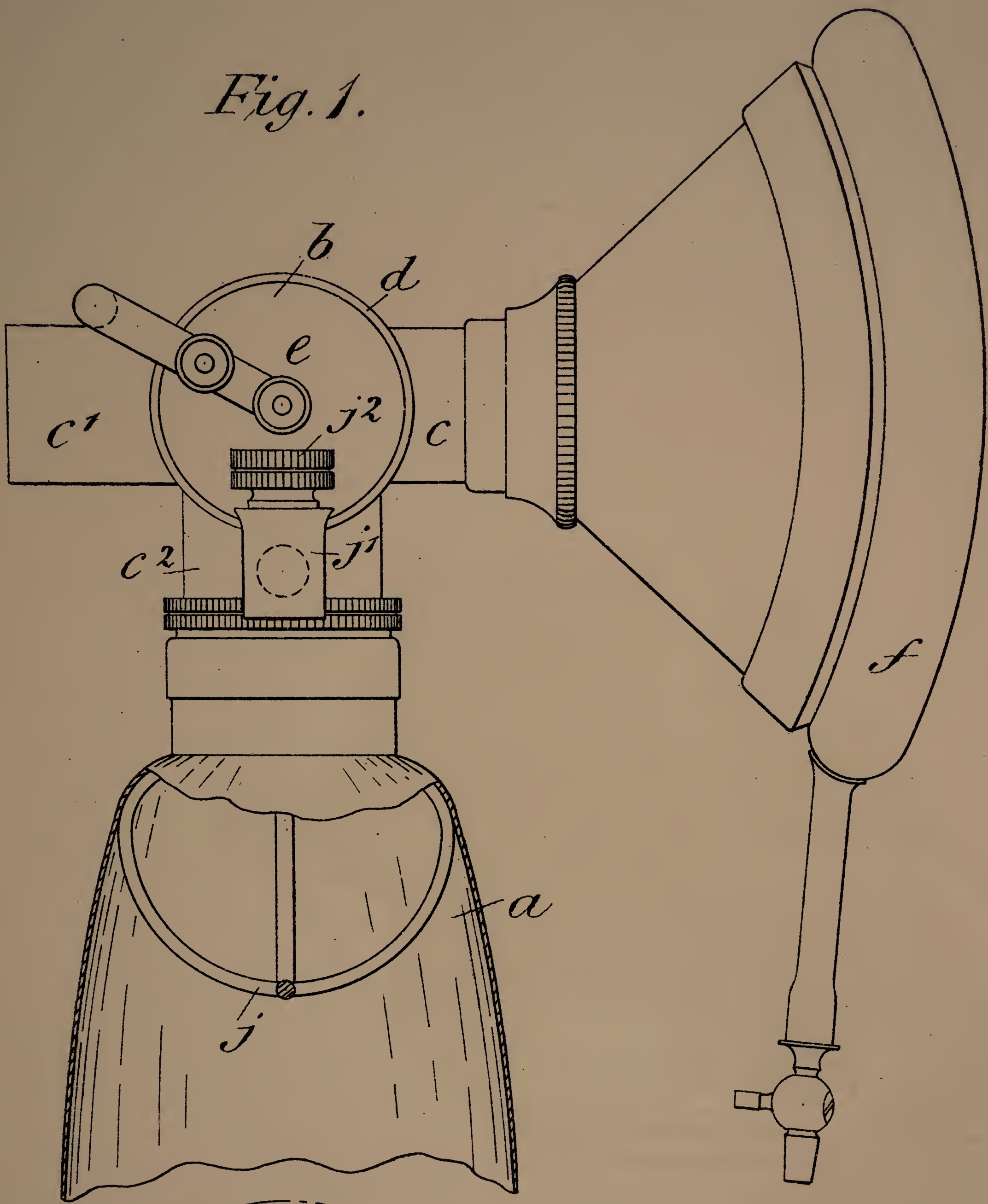
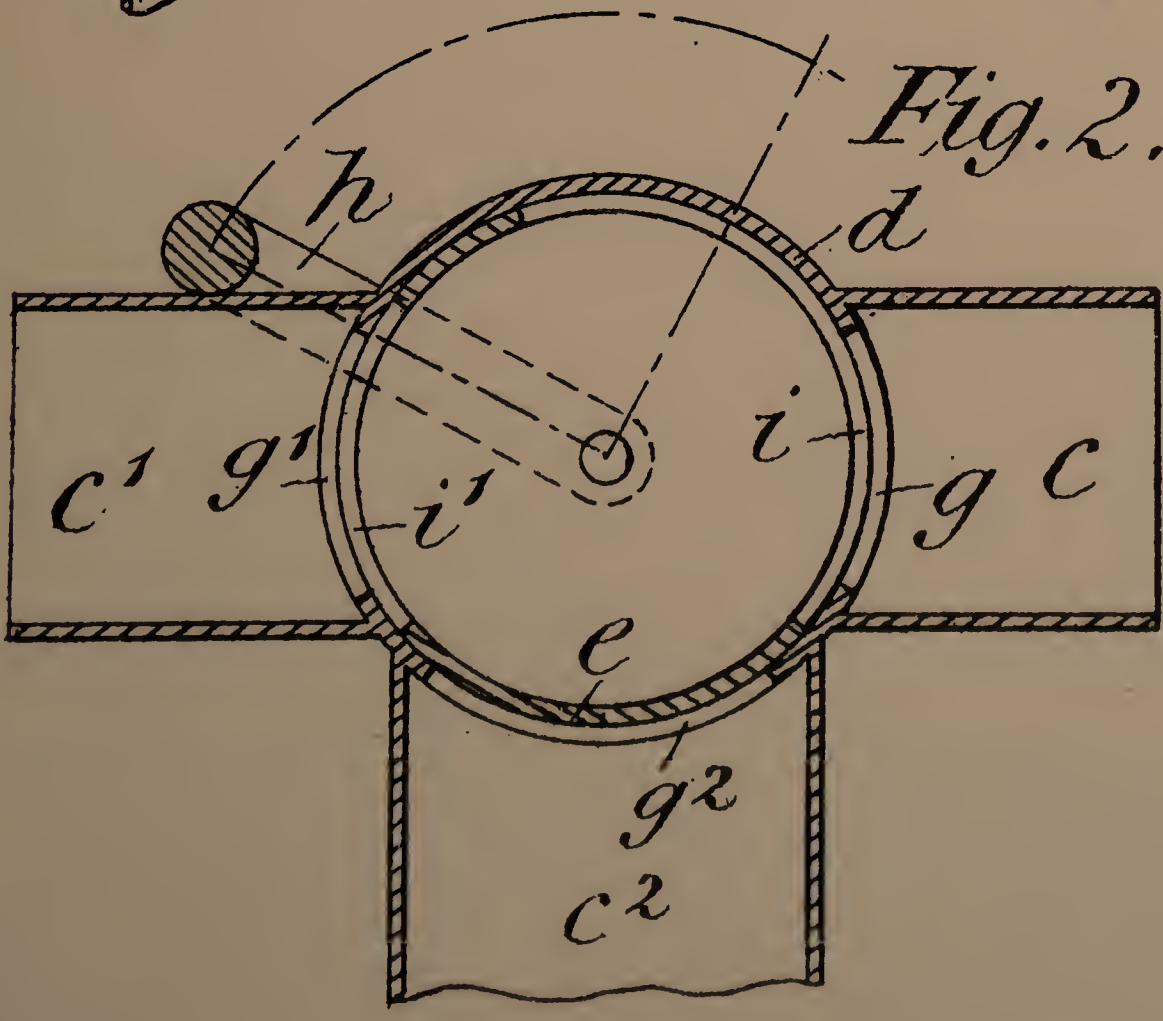


Fig. 2.



[This Drawing is a reproduction of the Original on a reduced scale.]

